

GHR SST-PP

*GODAE High Resolution Sea Surface Temperature
Pilot Project*

The GODAE High Resolution SST Project as an NDE Customer

Presented By Ken Casey (NESDIS/NODC)



<http://www.ghrsst-pp.org>

What is the GHR SST-PP?

What is
GHR SST?

How is NOAA
Involved now?

GHR SST as an
NDE Customer?

- GODAE is an international project dedicated to the development of *operational global ocean analysis and prediction systems*
- GODAE depends on high-quality SST data products to *constrain upper ocean circulation and thermal structure of ocean models*
- Global coverage SST data products need to:
 - be **accurate** (to better than 0.5K),
 - be **operationally available** in near real time (daily),
 - have **high spatial resolution** (<10km), and
 - have **high temporal resolution** (6-12 hours).
- In 2000, there were no SST products that could satisfy these requirements: so the IGST initiated the GHR SST-PP

GHR SST-PP Goals

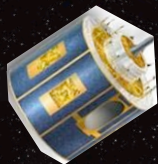
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GHR SST as an
NDE Customer?

- Provide the next generation of global SST products for operational and climate users
 - Create integrated common format products (SST, Sea Ice, uncertainties, auxiliary QC)
 - Create operationally efficient and scientifically valid methodologies for real time fusion of SST data
 - Deliver products to applications in national, regional and international communities
 - Minimize duplication of activities within the global SST Community
 - Develop comprehensive real-time *and* retrospective systems

MSG-SEVIRI
Imager



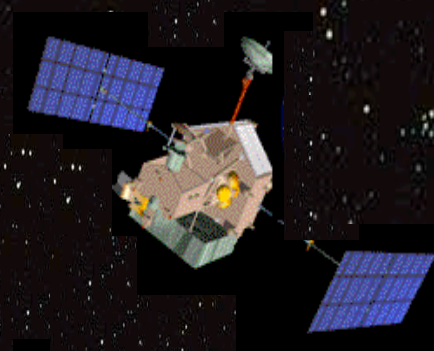
MTSAT-1R
Imager



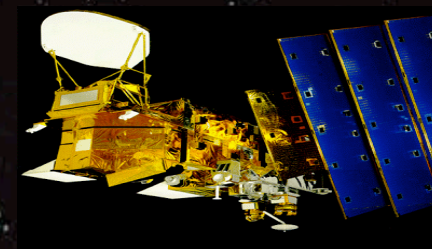
GOES
Imager



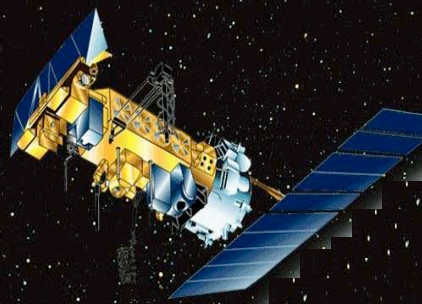
TRMM
TMI



AQUA
AMSR-E
MODIS



POES
AVHRR



ENVISAT
AATSR



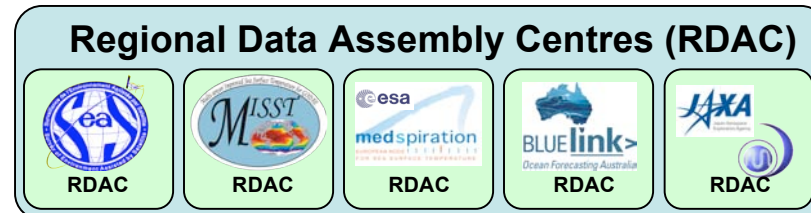
And someday (soon)
NPP and NPOESS!

Regional/Global Task Sharing

What is GHR SST?

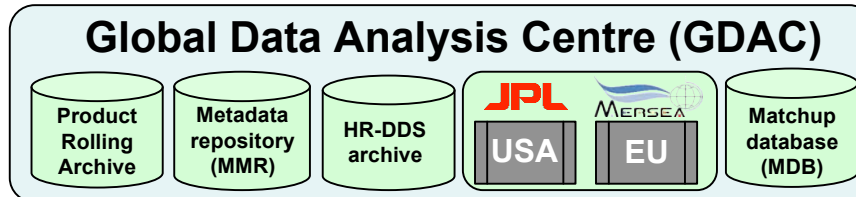
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SST data products (L2P, L4)


 **Ingestion, Dissemination and Processing Service (IDPS)**



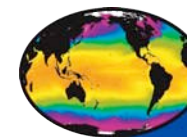
Global L4 analysis systems...



Global coverage L4 SST products

 **GHR SST-PP Long Term Stewardship and Reanalysis Facility (LTSRF) at NODC**

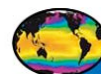
Historical time series SST CDR products



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GODAE High Resolution Sea Surface Temperature Pilot Project

A working demonstration of GEOSS!



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GODAE High Resolution Sea Surface Temperature Pilot Project

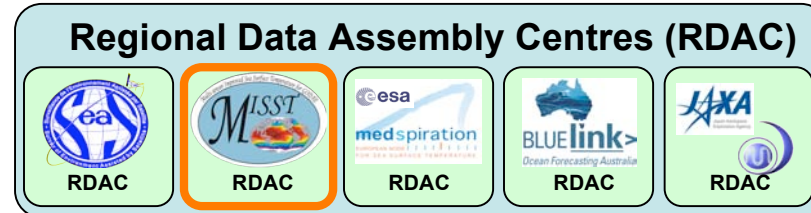


Current NOAA Involvement

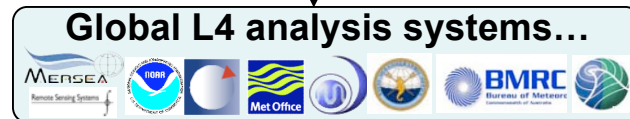
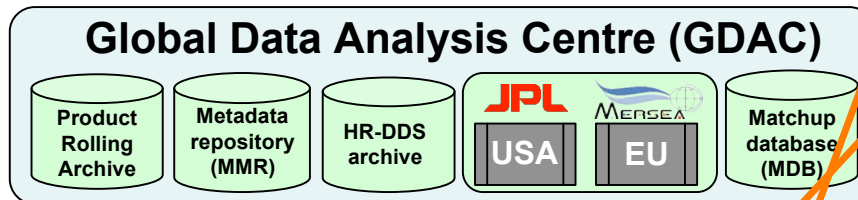
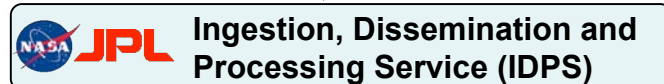
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Global coverage L4 SST products



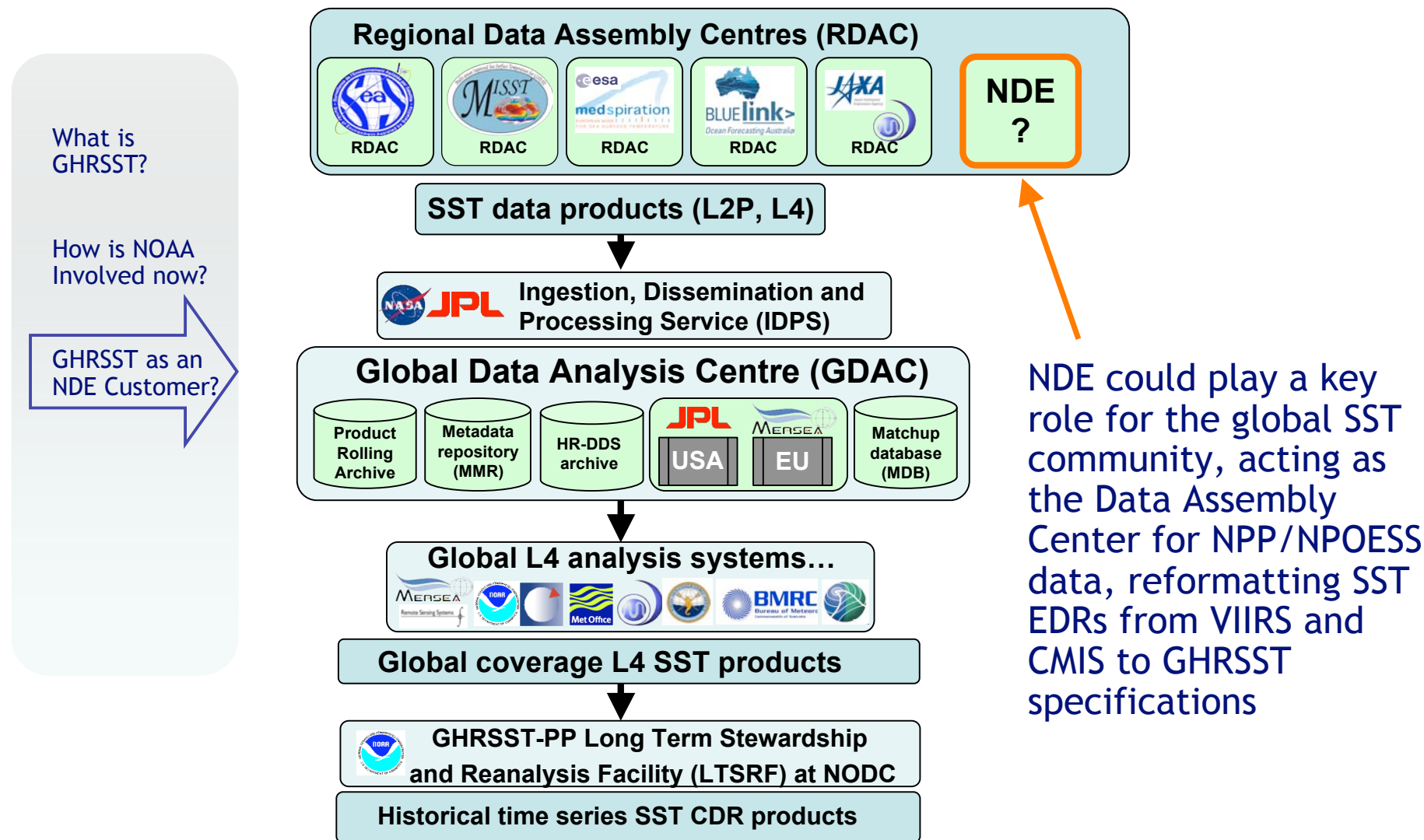
ORA: real time GOES L2P and POES/GOES analysis

ESRL: Optimal analysis algorithms, diurnal variability, error characterization

NCDC: Optimal analysis and blending algorithms

NODC: Archive, long term stewardship, and reanalysis CDRs

How might NDE play a role?



For More Information

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and Dr. Eric Bayler (ORA) is a co-PI on the US MISST project

